

Space Day 2003

April 2003

communiqué

Countdown to Space DaySM – May 1, 2003

With only one month to go, communities and organizations across the U.S. and throughout Canada are getting set to blast off with a variety of exciting **Space Day 2003** events and activities.

A remarkable day is planned for hundreds of young guests at Chicago's DePaul University, where hands-on activities, from launching rockets to simulated air-bag landings, will reflect the challenges facing NASA's Mars Exploration Rover project. (See "Countdown to Mars," page 2.) Capping off the event is a special remote observing session using

classrooms. The company is also hosting elementary school students at the Denver Museum of Nature and Science for a

presentation by NASA astronaut Bruce McCandless and the IMAX[®] film "Space Station." In Colorado Springs and throughout the greater Denver area 25,000 students will celebrate **Space Day** with guest speakers, hands-on activities and facility tours thanks to Shades of Blue, the National Space Science Technology Institute and Lockheed Martin. As a bonus, astronauts will throw out the ceremonial first pitch at a local minor league baseball stadium.

Farther west, Apollo 13 astronaut Fred Haise will participate in three days of presentations

at the Seattle Museum of Flight; while San Diego's Aerospace Museum will host "Imagining the Future of Flight: An Exhibition

(Continued on back cover)

Our Ultimate Goal



*A message from
Dr. Vance Coffman,
Chairman and CEO
of Lockheed Martin
and Space Day
Co-Chair*

With only one month to go before **Space Day 2003**, it is important for us to remember the critical purpose upon which this annual celebration is based. As our nation faces unprecedented challenges in national and economic security, the demand for scientists and engineers is expected to increase at almost four times the rate of all other occupations. Will our next generation be ready to respond?

Space Day's ultimate goal is to help strengthen our educational system by building upon young students' early interest in math and science and their fascination with space. In doing so, we hope to lay the foundation for America's technologically skilled workforce of the future.

As our Partners and Associates, you are sharing in this important endeavor. Through your zeal and dedication, **Space Day** is now a national phenomenon - one that is instilling a new enthusiasm for science and technology among our students and helping to inspire the next generation of inventors, aviators and explorers to help guide our future. You are the *real* stars of **Space Day**. Thank you, and keep up the good work!



The sky's the limit on May 1 when millions of children, teachers, **Space Day** Partners and Associates take part in *Celebrating the Future of Flight* with special events, guest speakers, tours and much more.



telescopes in Japan that relay images of Mars in real-time back to DePaul.

Meanwhile in Hutchison, Kansas, Wally Schirra -- one of the original seven astronauts and the only one to have flown on Mercury, Gemini and Apollo -- will appear before 5,000 youth at the Kansas Cosmosphere. In Denver, more than 80 employees at Lockheed Martin Space and Strategic Missiles will be visiting area



Space DaySM 2003 PARTNERS

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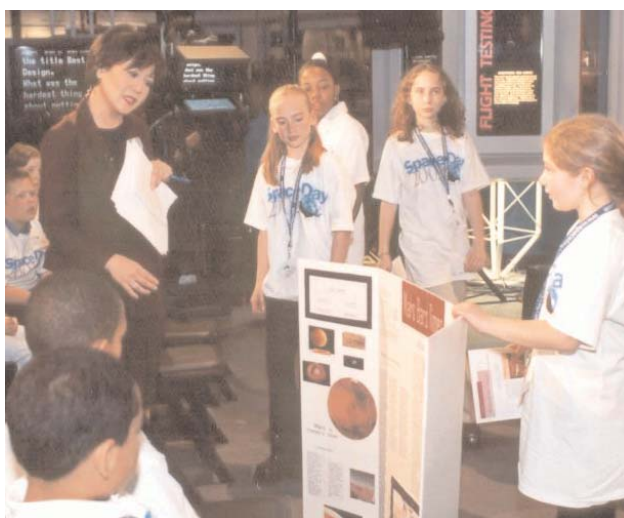
STAY TUNED...

Special Space Day Programming

We are delighted to announce a series of exciting, interactive **Space Day** national programming events, designed to capture students' imaginations and convey the thrill of space exploration and the future of flight. Check out the schedule below, and consider incorporating some or all of the programs into your **Space Day** activities.

12 noon to 1:00 PM (EDT)

Cyber Space DaySM - Hosted by CBS News correspondent Joie Chen and Bianca Baker, teenage host of NASA's *Science Files*, **Space Day's** annual webcast



Joie Chen interviews a "Stellar" team during **Cyber Space Day 2002**

will feature Senator John Glenn, NASA's Deputy Administrator Fred Gregory, NASA's Morphing Program Manager Anna-Maria McGowan and Tim McElyea, author of *A Vision of Future Space Transportation - A Visual Guide to the Space Crafts of Tomorrow*. Some of the "Stellar" Design Challenges teams will also be interviewed. (Visit www.spaceday.org.)

1:00 to 2:00 PM (EDT)

Countdown to Mars - Hosted by Bill Nye "The Science Guy," this PBS special will offer a live, behind-the-scenes look at one of the most significant missions of the Space Age -- NASA's 2003 Mars Exploration Rover project -- while allowing students to conduct science and engineering experiments just like those of the actual NASA researchers. Viewers across North America can interact via e-mail as 250 students participate on camera in hands-on experiments. Originating live from the campus of DePaul University in Chicago and NASA's Jet Propulsion Laboratory in Pasadena, the program will be seen nationally on PBS stations, NASA-TV and online. (Log on <http://passporttoknowledge.com/mars> for details.)

2:00 to 3:00 PM (EDT)

NASA Quest Webcast - Wouldn't it be great to have your very own robot buddy - one that talks to you and understands what you say? This March, NASA invited teachers and students to develop and submit their preliminary designs for robot "helpers" in tandem with those now being developed to assist astronauts aboard the International Space Station. During this webcast, members of NASA's ISS Robot Challenge team will review students' final submissions and answer questions online. (Visit <http://quest.arc.nasa.gov/projects/space/robotdesign>.) ■



For Dr. Kathryn Clark, Space Means Fun!



Dr. Kathy Clark aboard an F-18 jet.

When Kathy Clark was 10, she was visiting a neighbor's house in Ohio when John Glenn, who was campaigning for Senator, walked in the door. "I flipped," she recalls. "He was very inspiring. He signed my Snoopy

sweatshirt - which I still have - and said to me, 'Well, if you want to be an astronaut, you should be one.'"

Decades later, Kathy - now Dr. Kathryn Clark - became NASA's Chief Scientist for the International Space Station Program and then NASA's Chief Scientist for the Human Exploration and Development of Space Enterprise. In the latter position, she worked with researchers throughout NASA and was particularly interested in "human factors" -- that is, anything to do with the health, safety and efficiency of crews in long-duration flight.

Kathy now serves as a consultant in the fields of space, oceans and education. One of her clients is the Jean-Michel Cousteau Society. "There is a huge relationship between the seas and space," she explains. "The environments are strikingly similar. You need to bring your own air, there are pressure concerns, and they are both stressful. We train astronauts in water because it's the closest to weightlessness we can get."

Kathy, a pilot, recently had her own experience with weightlessness aboard a KC-135, whose precipitous dives initiate periods of "weightlessness" for test and training purposes. In that same two-week period, she also enjoyed the thrill of a lifetime when she boarded

an F-18 fighter jet and participated in a series of "cats" (catapult takeoffs) and "traps" (tailhook landings) from the U.S.S. George Washington.

A board member of the **Space Day Foundation**, Kathy understands the importance of using space to teach math and science: "To me, education should be entertaining. Physics is much more fun when you can talk about a rocket blasting off with millions of pounds of thrust and people floating around in zero gravity. That's why I've been a big fan of **Space Day** for years."

Kathy is particularly proud of the support **Space Day** is receiving from its Partners and Associates. "Just as John Glenn helped to encourage me," she says, "they are inspiring millions of kids to broaden their horizons and discover how truly exciting learning can be." ■



Dr. Clark goes weightless aboard a KC-135.

ANNUAL STUDENT SURVEY - How do you think space flight will change in the future? What do you think is the biggest challenge to space exploration? These are just several of the thought-provoking questions asked in the **Space DaySM Student Survey**, conducted in cooperation with *USA TODAY* Education. Please encourage young people to take part in the survey by logging on to education.usatoday.com or spaceday.org. The results will be announced on **Space Day**.

STUDENT SIGNATURES IN SPACE[®] (S3)

From Australia to Alabama, more than 500 schools are participating in S3 this year. Schools will receive official S3 kits and are being encouraged to hold **Space Day** "signing" parties in their classrooms. Last year's S3 schools will soon receive their NASA certificates and may also hold **Space Day** "landing" parties.

DESIGN CHALLENGES -

Students from Soldotna, AK to Manassas, VA submitted hundreds of solutions to the 2003 **Space DaySM Design Challenges**. With so many excellent entries, the judges were hard-pressed to select the stellar achievers. However, 17 "Stellar" teams from across the country that demonstrated the most creative or useful solutions will be honored during **Space Day's** Opening Ceremony in Washington, D.C.

WELCOME ABOARD - We are pleased to announce five new **Space Day** Partners: Massachusetts engineering software company PTC (Parametric Technology Corporation), Vancouver's ETI (Entertainment Technologies, Inc.), Pennsylvania's Analytical Graphics, TIVY Inc. of Los Angeles and Kennedy Space Center Visitor Complex.

GUBERNATORIAL PROCLAMATIONS -

Governors Gray Davis of California, Rick Perry of Texas, Bill Owens of Colorado, Thomas Vilsack of Iowa, John Hoeven of North Dakota and Mick Huckabee of Arkansas have proclaimed May 1, 2003 as **Space Day** in their respective states.

WEB NOTES - Check out the NASA Educator Astronaut Web site for interactive exercises and games, forums, chats, lesson plans and learning nodes about life as an astronaut and the careers that make missions happen:

<http://edspace.nasa.gov/earthcrew/missions.html>.

Countdown to Space Day

(continued from the front cover)

of Original Aerospace Vehicles" as well as activities in which children design and build their own future flyers. San Jose's Museum of Science and Technology, will feature four days of special IMAX® screenings.

To the east, the New York Hall of Science in upper Manhattan will host a two-day astronomy discovery lab and a "Living in Space" demonstration where visitors can learn how astronauts carry out their daily activities aloft. A few miles away in Garden City, the Cradle of Aviation Museum has arranged a day of movies, presentations and education stations. And upstate, Syracuse's Museum of Science and Technology will host hundreds of local students to view the IMAX® film "The Dream is Alive" as the mayor and county executive announce a joint **Space Day** proclamation.

In New England, Raytheon employee Paul Manning is organizing a static air show in Tewksbury, MA with an array of special guests including Tuskegee Airman Lt. Col. Mike Stockwell. Two schools in Maine will bridge together via NASA's traveling "Starship 2040" an 18-wheeler exhibit in which students can meet NASA staff working on future spacecraft.

Moving south to Florida, the Kennedy Space Center Visitor Complex will mark the day with tours, hands-on activities and astronaut presentations for more than 1,000 youth.

Communiqué readers have already enjoyed a preview of activities in Texas and Canada in our January and February issues. For a more

complete picture of this year's widespread celebration, check out "**Space Day** in Your Neighborhood" at www.spaceday.org.

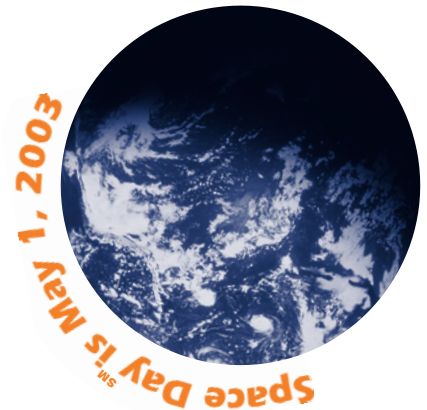
**Let's make Space Day 2003
a celebration to remember! ■**



STILL NEED SPACE DAY IDEAS?

Check out "101 Ways to Celebrate **Space Day**" on www.spaceday.org - or contact Brian Ewenson at (202) 833-8121, bewenson@devillier.com.

Current and past issues can be downloaded at www.spaceday.org/en/partners/communiques.php



Space Day 2003 Communiqué
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